WRITE-BEFORE-READ INTERLOCK FOR R-UNIT OPERANDS

ABSTRACT OF THE DISCLOSURE

An exemplary embodiment of the invention is a method for holding up R-unit operands for a minimum number of cycles until all prior updates have completed by comparing addresses in at least one queue and interlocking valid R-unit register address matches. The method includes receiving a plurality of R-unit register addresses and storing these R-unit register addresses in at least one queue. This method includes a write queue, a read queue, and a pre-write queue. Further, this method requires accessing these queues and comparing the R-unit register addresses therein. After the addresses are compared the method determines whether there is a valid match between the R-unit register addresses and if so, implementing one or more interlocks.